Yealink

BroadSoft Partner Configuration Guide

Yealink SIP-TxP/T3xG Series

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BroadWorks® Guide

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Document Revision History

Version	Reason for Change
1.1	Introduced document for Yealink SIP-T28 version 2.0.0.9.
1.2	Edited and published document.
1.3	Updated document for additional models.
1.4	Edited and published document.
1.5	Updated document for Yealink SIP-T28 version 2.51.0.1 test with BroadWorks Release 17.0. Updated the document for Device Management.
1.6	Edited and published document.
1.7	Updates to Device Management configuration requirements.
1.8	Edited and published document.
1.9	Added TxP configuration instructions.
2.0	Edited and published document.
2.1	Modified to incorporate the T18P model and to update the Device Management section.
2.2	Edited and published document.
2.3	Modified manual instructions for device management file parameters.
2.4	Updated document for Yealink SIP-TxP version X.60.0.110 test with BroadWorks Release 17.0. Modified to incorporate the T38G and T32G model and to update the Device Management configuration instructions.
2.5	Edited changes and published document.
2.6	Updated document to incorporate T21P, as a supported device model.
2.7	Edited changes and published document.

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1 Overview

This document describes the configuration procedures required for a Yealink SIP-TxP/T3xG series to make full use of the capabilities of BroadWorks. This includes the following models:

- SIP-T12P
- SIP-T18P
- SIP-T20P
- SIP-T21P
- SIP-T22P
- SIP-T26P
- SIP-T28P
- SIP-T32G
- SIP-T38G
- SIP-T80P

The SIP-TxP/T3xG is one of the many desk phones that interoperate with BroadWorks.

The SIP-TxP/T3xG uses the Session Initiation Protocol (SIP) to communicate with BroadWorks for call control. It also translates voice to audio packets for transmission across a packet network.

This guide describes the specific configuration items that are important for use with BroadWorks. It does not describe the purpose and use of all configuration items on the SIP-TxP/T3xG series. For more information, see the *Yealink TxP SIP Phone User Manual* [1] supplied by Yealink.

2 Interoperability Status

This section provides the known interoperability status of the Yealink SIP-TxP/T3xG with BroadWorks. This includes the version(s) tested, capabilities supported and known issues.

Interoperability testing validates that the device interfaces properly with BroadWorks via the SIP interface. Qualitative aspects of the device or device capabilities not affecting the SIP interface such as display features, performance, and audio qualities are not covered by interoperability testing. Requests for information and/or issues regarding these aspects should be directed to Yealink.

2.1 Verified Versions

The following table identifies the verified Yealink SIP-TxP/T3xG and BroadWorks versions and the month/year the testing occurred. If the device has undergone more than one test cycle, versions for each test cycle are listed, with the most recent listed first.

Compatible Versions in the following table identifies specific SIP-TxP/T3xG versions, which the partner has identified as compatible and should interface properly with BroadWorks. Generally, maintenance releases of the validated version are considered compatible and may not be specifically listed here. Contact Yealink for any questions concerning maintenance and compatible releases.

NOTE: Interoperability testing is normally performed with the latest generally available (GA) device firmware/software and the latest GA BroadWorks release and service pack at the time the testing occurs. If there is a need to use a non-verified mix of BroadWorks and device software versions, customers can mitigate their risk by self-testing the combination using the *BroadWorks SIP Access Device Interoperability Test Plan* [4].

Verified Versions Table

Date (mm/yyyy)	BroadWorks Release	SIP-TxP/T3xG Verified Version	SIP-TxP/T3xG Compatible Versions
05/2011	Release 17.0	SIP-T12P 5.60.0.110 SIP-T20P 9.60.0.110 SIP-T21P 21.61.0.10 SIP-T22P 7.60.0.110 SIP-T26P 6.60.0.110 SIP-T28P 2.60.0.110 SIP-T32G 32.0.0.20 SIP-T38G 38.0.0.50 SIP-T80P 8.60.0.110	Any maintenance version of the verified versions.
03/2011	Release 17.0	SIP-T18P 18.0.0.80	Any maintenance version of the verified version.

Verified Versions Table			
Date (mm/yyyy)	**BroadWorks Release**	**SIP-TxP/T3xG Verified Version**	**SIP-TxP/T3xG Compatible Versions**
10/2010	Release 17.0	SIP-T12P 5.51.0.10 SIP-T20P 9.51.0.10 SIP-T22P 7.51.0.10 SIP-T26P 6.51.0.10 SIP-T28P 2.51.0.10 SIP-T80P 8.51.0.10	Any maintenance version of the verified versions.
09/2009	Release 14.sp5	SIP-T12P 5.0.0.9 SIP-T20P 9.0.0.9 SIP-T22P 7.0.0.9 SIP-T26P 6.0.0.9 SIP-T28P 2.0.0.9 SIP-T80P 8.0.0.9	Any maintenance version of the verified versions.

2.2 Interface Capabilities Supported

The Yealink SIP-TxP/T3xG has completed interoperability testing with BroadWorks using the *BroadWorks SIP Access Device Interoperability Test Plan* [4]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas, such as "Basic" call scenarios and "Redundancy" scenarios. Each package is composed of one or more test items, which in turn are composed of one or more test cases. The test plan exercises the SIP interface between the device and BroadWorks with the intent to ensure interoperability sufficient to support the BroadWorks feature set.

The *Supported* column in the following table identifies the Yealink SIP-TxP/T3xG's support for each of the items covered in the test plan packages, with the following designations:

- Yes Test item is supported.
- No Test item is not supported.
- NA Test item is not applicable to the device type.
- NT Test item was not tested.

Caveats or clarifications are identified in the *Comments* column.

Note that *DUT* in the following table refers to the *Device Under Test,* which in this case is the Yealink SIP-TxP/T3xG.

BroadWorks SIP Access Device Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
Basic	Call Origination	Yes	
	Call Termination	Yes	
	Session Audit	Yes	
	Session Timer	Yes	

BroadWorks SIP Access Device Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Ringback	Yes	
	Forked Dialog	Yes	
	Early UPDATE	No	
	Early-Session	No	
	181 Call Being Forwarded	Yes	
	Dial Plan	Yes	
	DTMF – Inband	Yes	
	DTMF – RFC 2833	Yes	
	DTMF – DTMF Relay	Yes	
	Codec Negotiation	Yes	
	Codec Renegotiation	Yes	
BroadWorks Services	Third-Party Call Control – Basic	NA	
	Third-Party Call Control – Advanced	Yes	
	Voice Message Deposit/Retrieval	Yes	
	Message Waiting Indicator	Yes	
	Voice Portal Outcall	Yes	
	Advanced Alerting	Yes	
	Calling Line ID	Yes	Except T18P
	Connected Line ID	Yes	Except T18P
	Diversion Header	Yes	
	History-Info Header	Yes	
	Advice of Charge	No	
DUT Services – Call Control Services	Call Waiting	Yes	
	Call Hold	Yes	
	Call Transfer	Yes	
	Three-Way Calling	Yes	
	Network-Based Conference	Yes	Except T12P, T18P, T80P
DUT Services – Registration and Authentication	Register Authentication	Yes	
	Maximum Registration	Yes	
	Minimum Registration	Yes	
	Invite Authentication	Yes	
	Re-Invite/Update Authentication	Yes	
	Refer Authentication	Yes	
	Device Authenticating BroadWorks	No	
DUT Services – Fax	G711 Fax Passthrough	NA	

BroadWorks SIP Access Device Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	G711 Fax Fallback	NA	
	T38 Fax Messaging	NA	
DUT Services – Miscellaneous	Do Not Disturb	Yes	
	Call Forwarding Always	Yes	
	Call Forwarding Always Diversion Inhibitor	Yes	
	Anonymous Call	Yes	
	Anonymous Call Block	Yes	
	Remote Restart Via Notify	Yes	
Advanced Phone Services – Busy Lamp Field	Busy Lamp Field	Yes	Except T12P, T18P
Advanced Phone Services – Feature Key Synchronization	Do Not Disturb	Yes	Except T12P, T18P, T80P
	Do Not Disturb Ring Splash	Yes	Except T12P, T18P, T80P
	Call Forwarding	Yes	Except T12P, T18P, T80P
	Call Forwarding Always Ring Splash	Yes	Except T12P, T18P, T80P
	Call Forwarding Always Diversion Inhibitor	Yes	Except T12P, T18P, T80P
	Call Center Agent Logon/Logoff	No	
	Call Center Agent Unavailable Code	No	
Advanced Phone Services – Missed Calls Display Synchronization	Missed Calls Display Sync	Yes	Except T12P, T18P, T80P
Advanced Phone Services – Shared Call Appearance using Call Info	Line-Seize	Yes	Except T12P, T18P, T80P
	Call-Info/Lamp Management	Yes	Except T12P, T18P, T80P
	Public Hold	Yes	Except T12P, T18P, T80P
	Private Hold	Yes	Except T12P, T18P, T80P
	Multiple Call Arrangement	Yes	Except T12P, T18P, T80P
	Bridging	Yes	Except T12P, T18P, T80P
Advanced Phone Services – Shared Call Appearance using Dialog Event	Dialog Event	No	
	Hold/Retrieve	No	
	Multiple Call Arrangement	No	
	Bridging	No	
Advanced Phone Services – Call Center	Hold Reminder	No	
	Call Information	No	
	Hoteling Event	No	
	Status Event	No	

BroadWorks SIP Access Device Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
	Disposition Code	No	
	Emergency Escalation	No	
	Customer Originated Trace	No	
Redundancy	DNS SRV Lookup	Yes	Except T18P, T80P
	Register Failover/Failback	Yes	Except T18P, T80P
	Invite Failover/Failback	Yes	Except T18P, T80P
	Bye Failover	Yes	Except T18P, T80P
SBC/ALG	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	
Video – Basic Video Calls	Call Origination	NA	
	Call Termination	NA	
	Call Hold	NA	
	Call Waiting	NA	
	Call Transfer	NA	
Video – BroadWorks Video Services	Auto Attendant	NA	
	Voice Messaging	NA	
	Custom Ringback	NA	
TCP	Register	Yes	
	Outgoing Invite	Yes	
	Incoming Invite	Yes	

2.3 Known Issues

This section lists the known interoperability issues between BroadWorks and specific partner release(s). Issues identified during interoperability testing and known issues identified in the field are listed.

The following table provides a description of each issue and, where possible, identifies a workaround. The verified partner device versions are listed with an "X" indicating that the issue occurs in the specific release. The issues identified are device deficiencies or bugs, so typically not BroadWorks release dependent.

The *Issue Number* is a BroadSoft ExtraView partner issue number if the testing was performed by BroadSoft. If the testing was performed by the partner or a third party, the partner may or may not supply a tracking number.

For more information on any issues related to the particular partner device release, see the partner release notes.

Issue Number	Issue Description	Partner Version			
		x.0.0.9	x.51.0.10		
	Device Management – file download fails if Xtended Services Platform generates HTTP 302. The TxP fails to download configuration files and firmware via the Xtended Services Platform if the Xtended Services Platform responds to the http get with a 302 redirect. This occurs in Xtended Services Platform farm scenarios and other scenarios in which the URL changes. Workaround: No workaround. This issue is resolved in TxP version x.51.0.17.		X		
	Device Management – file download fails if TxP upgrade URL is configured as an FQDN. The TxP fails to download configuration files and firmware via the Xtended Services Platform if the phone's upgrade URL is configured as an FQDN. Workaround: Ensure the upgrade URL is configured as an IP address. This issue is resolved in TxP version x.51.0.21.		X		

3 BroadWorks Configuration

This section identifies the required BroadWorks device profile for the Yealink SIP-TxP/T3xG as well as any other unique BroadWorks configuration required for interoperability with the SIP-TxP/T3xG.

3.1 BroadWorks Device Profile Configuration

This section identifies the device profile to use when deploying the Yealink SIP-TxP/T3xG with BroadWorks.

The following table identifies the required BroadWorks device identity/profile settings for interoperability between the SIP-TxP/T3xG and BroadWorks. For an explanation of the profile parameters, refer to the *BroadWorks Device Management Configuration Guide* [2].

For most of the following parameters, an "X" indicates the parameter function is supported and/or required. If the item is blank, it is not supported. For items where text is supplied, the text content maps directly to the web page for adding or modifying a device profile.

Yealink SIP-TxP/T3xG Identity/Device Profile	
Signaling Address Type	Intelligent Proxy Addressing
Standard Options	
Number of Ports	T12P: 2 T18P: 1 T20P: 2 T21P: 2 T22P: 3 T26P: 3 T28P: 6 T32P: 3 T38P: 6 T80P: 6
Ringback Tone/Early Media Support	Local Ringback – No Early Media
Authentication	Enabled
Registration Capable	X
Static Registration Capable	
E.164 Capable	
Trusted	
Authenticate REFER	
RFC 3264 Hold	X
Video Capable	
Use History-Info Header	
Advanced Options	
Route Advance	
Wireless Integration	
PBX Integration	

Yealink SIP-TxP/T3xG Identity/Device Profile	
Add P-Called-Party-ID	
Auto Configuration Soft Client	
Requires BroadWorks Call Waiting Tone	
Advice of Charge Capable	
Forwarding Override	
Conference Device	
Music On Hold Device	
Requires BroadWorks Digit Collection	
Requires MWI Subscription	
Support Call Center MIME Type	
Reset Event	checkSync
Trunk Mode	User
Auto Configuration Options	
Web Based Configuration URL Extension	
Auto Configuration Type	2 Config File
Enable Monitoring	
CPE System File Name	
Device File Format	

3.2 BroadWorks Configuration Steps

No other steps are needed on BroadWorks for setting up the device.

4 SIP-TxP/T3xG Configuration

The SIP-TxP/T3xG can be configured with a configuration file using the Trivial File Transfer Protocol (TFTP) or through its embedded web server. The following examples describe how to set the parameters using a configuration file. This configuration description assumes the SIP-TxP/T3xG uses the Dynamic Host Configuration Protocol (DHCP) to obtain an IP address, TFTP server, and other network settings. The SIP-TxP/T3xG should be configured to load the configuration file each time it resets or re-synchronizes. For detailed information on automated provisioning, see the *Yealink TxP SIP Phone User Manual* [1].

The capabilities of the SIP-TxP/T3xG have been verified for use with BroadWorks based on the settings described in the following table. For more information on the meaning, purpose, and applicability of the individual configuration items see the *Yealink TxP SIP Phone User Manual* [1].

Configuration Files

Files Provided by Partner	Level	Description
y0000000000<xx>.cfg	system configuration file	"y0000000000xx.cfg", where "xx" associated with the hardware version of Yealink Device, that is, y000000000000.cfg for Yealink SIPT28P.
<MACADDRESS>.cfg	device-specific configuration file	

4.1 System Level Configuration

This section describes system-wide configuration items that are generally required for each SIP-TxP/T3xG to work with BroadWorks. Subscriber-specific settings are described in the next section.

Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		

Step 1	**Set SIP Proxy/Domain.**
	`SIPServerHost = as.broadworks.net`
	`SIPServerPort = 5060`
		Set the SIP-TxP/T3xG series SIP server to the Fully Qualified Domain Name (FQDN) for the BroadWorks Application Server cluster.
		The domain must match the domain configured for the BroadWorks subscriber's line/port domain.

Step 2	**Set Outbound Proxy.**
	`UseOutboundProxy = 1`
	`OutboundHost = sbc.broadworks.net`
	`OutboundPort = 5060`
		Set the Outbound Proxy to the session border controller (SBC) if one is deployed between the SIP-TxP/T3xG series and BroadWorks.
		If there are redundant SBCs, set it to the FQDN for the SBC cluster.

Step 3	**Set SIP Timers.**
	`default_t1 = 0.5`
	`default_t2 = 4`
	`default_t3 = 5`
		The SIP timers should be set to levels short enough to support a timely failover when there is no server response.

Step	Command	Purpose
System Configuration Items y0000000000<xx>.cfg		
Step 4	**Set Register Expire Timer.** Expire = 3600	Set the registration period.
Step 5	**Enable reliable response.** Enable 100Rel = 1	Reliable provisional response (PRACK) should be enabled.
Step 6	**Enable Session Timer.** EnableSessionTimer = 1 SessionExpires = 300 SessionRefresher = 1	Set the SIP-TxP/T3xG series to enable Session Timer. Session Refresher: 0 = uac 1 = uas
Step 7	**Enable Call Waiting.** Call_Waiting = 1 Call_WaitingTone = 1	Set the SIP-TxP/T3xG series to enable Call Waiting and Call Waiting Tone.
Step 8	**Enable MWI.** SubscribeMWI = 0 SubscribeMWIExpire = 3600	MWI: Solicited when setting SubscribeMWI = 1. MWI: Not solicited when setting SubscribeMWI = 0.
Step 9	**Enable negotiated DTMF type.** DTMFInbandTransfer = 1	Set the SIP-TxP/T3xG series to enable inband or RFC 2833 negotiated DTMF.
Step 10	**Select Transport Type.** Transport = 0	Set the SIP transport: Transport = 0 (UDP) Transport = 1 (TCP) Transport = 2 (TLS) (except T18P) Transport = 3 (DNS-SRV) (except T80P)
Step 11	**Enable Feature Key Sync.** BroadsoftFeatureKeySync = 1	Enable Feature Key Sync (except T18): 1: Enable 0: Disable

4.2 Subscriber Level Configuration Parameters

This section identifies the device-specific parameters, including registration and authentication. These settings must be unique across devices to be matched with the settings for a BroadWorks subscriber.

Provisioning a subscriber to register with BroadWorks allows calls to terminate to the subscriber's line. Registration requires that a unique address of record (AoR) is provisioned on BroadWorks and the phone; provisioning an AoR on BroadWorks consists of setting the line/port parameter to a unique value within the Application Server cluster.

Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 1	**Enable a line to be used.** Example: Enable = 1	Enable a line of the SIP-TxP/T3xG series to be used.
Step 2	**Configure display name for a line.** Example: DisplayName = Joe	For the line, configure the name to be displayed on the device.
Step 3	**Set Register User ID for a line.** Example: UserName = 2405551111	The *register user ID* must correspond with the line/port setting on BroadWorks.
Step 4	**Enable SIP Authentication for a line.** Example: AuthName = 2405551111 password = 123456	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
Step 5	**Configure eventlist BLF for a line.** BLFList_URI = <broadworks-blf-list-uri> Example: BLFList_URI = myblflist@as.iop1.broadworks.net	Configure the *eventlist* busy line field (BLF) on the *Account Settings* page to match the BroadWorks busy lamp field list URI setting for the user.
Step 6	**Configure Network Conference for a line.** conf-type = 2 conf-uri = <broadworks conference uri> Example: conf-uri = conf@as.iop1.broadworks.net	Select the *Network Conference* type and the *conference-uri* from the *Account Settings* page. The *conference-uri* must match the BroadWorks configured *conference-uri* setting.

Step	Command	Purpose
Subscriber parameters for the <MACADDRESS>.cfg		
Step 7	**Configure Network Phonebook for a line.** DisplayName = Broadsoft Phonebook Server = http://xsp1.iop1.broadworks.net/com.broadsoft.xsi-actions/v1.0/user/2413333610@as.iop1.broadworks.net/directories/calllogs/placed Port = 8080 UserName = 2413333601@as.iop1.broadworks.net PassWord = yealink	This configures the phone to use the BroadWorks Xsi interface to retrieve the group phone directory. Server: This is the identity of the BroadWorks Xsp server/cluster address and relevant xsi-actions parameters. UserName: This is the BroadWorks user's login name. PassWord: This is the BroadWorks user's login password.

4.3 Shared Call Appearance Configuration

The Shared Call Appearance (SCA) feature allows the administrator to add multiple locations to a given line. Any of the locations can be used to originate or receive calls.

When a call comes in to an idle line, all the provisioned locations for that line are alerted. The first location to answer the call is connected to the originator. If the line is already active in a call, only the active location is alerted.

A subscriber can originate calls from any of the configured locations. All other locations are unable to originate calls until all calls are released.

It is recommended that the phone number plus an index (<phoneNumber>_<index>) is used when provisioning the unique address of record (AoR) for each shared line. For example: 2405551111_2. If a phone number does not exist, the MAC address plus an index could be used (<macAddress>_<index>).

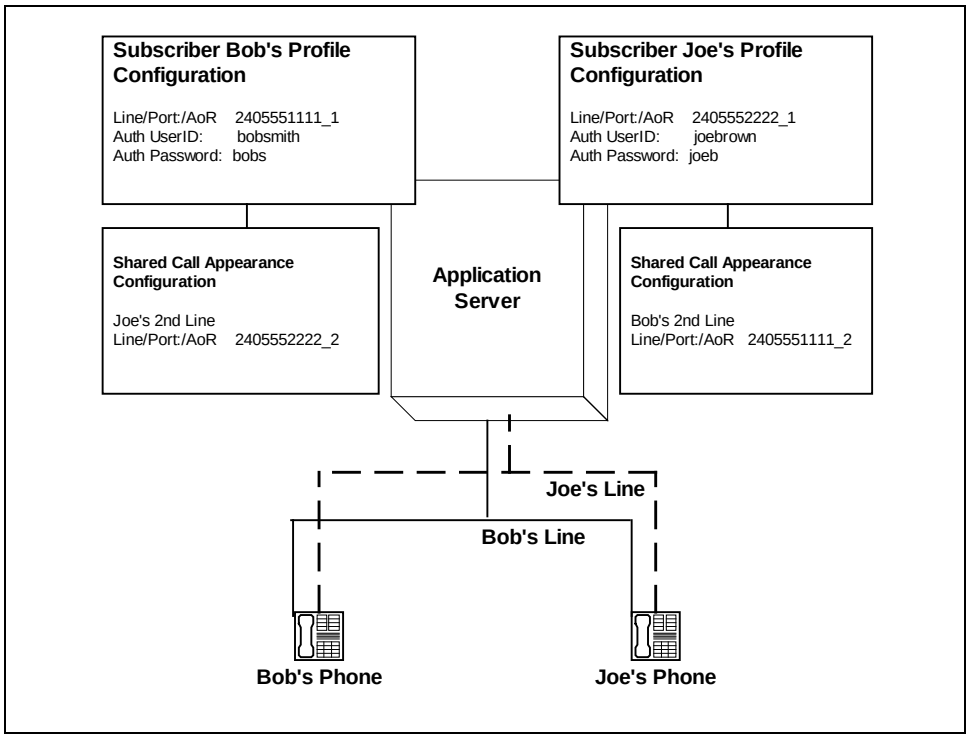

Figure 1 Shared Call Appearance Configuration

Figure 1 Shared Call Appearance Configuration shows that Bob and Joe each have two lines and that Bob shares a line with Joe and Joe shares a line with Bob. The figure also shows the applicable Subscriber Profile and Shared Call Appearance Configuration data for subscribers Bob and Joe.

When Bob (2405551111) is called, Bob's first line and Joe's second line will ring. When Joe (2405552222) is called, Joe's first line and Bob's second line will ring.

The following steps show how to configure both phones for this Shared Call Appearance configuration.

For configurations of SCA for the device, refer to the following example:

4.3.1 Bob's Phone Configuration – MAC.cfg

This is the SCA configurations as specified in MAC.cfg, that is, 0015651130dc.cfg where "0015651130dc" is the MAC address of the SIP phone.

The following steps are used to configure line 1 for Bob's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose
Step 1	**Configure line as shared.** `ShareLine = 1;`	Configure the line as "shared" (as opposed to "private").

Step 2	**Set Register User ID.**
	`Example:`
	`UserName = 2405551111_1;`
		The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication.**
	`Example:`
	`AuthName = bobsmith;`
	`password = bobs;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Bob is called, so it has Bob's authentication information.

Step 4	**Configure display name.**
	`Example:`
	`DisplayName = Bob Smith;`
		Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Bob's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose
Step 1	**Configure line as shared.** `ShareLine = 1;`	Configure the line as "shared" (as opposed to "private").

Step 2	**Set Register User ID.**
	`Example:`
	`UserName = 2405551111_2;`
		The register user ID must correspond with the line/port setting on BroadWorks.

Step 3	**Enable SIP Authentication.**
	`Example:`
	`AuthName = joebrown;`
	`password = joeb;`
		If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings.
		This line rings when Joe is called, so it has Joe's authentication information.

Step 4	**Configure display name.**
	`Example:`
	`DisplayName = Joe Brown;`
		Configure the name to be displayed on the device for this line.

4.3.2 Joe's Phone Configuration – MAC.cfg

The following steps are used to configure line 1 for Joe's phone. This line rings when Joe is called, so it has Joe's authentication information.

Step	Command	Purpose
Step 1	**Configure line as shared.** ShareLine = 1;	Configure the line as "shared" (as opposed to "private").
Step 2	**Set Register User ID.** Example: UserName = 2405552222_1;	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	**Enable SIP Authentication.** Example: AuthName = joebrown; password = joeb;	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. This line rings when Joe is called, so it has Joe's authentication information.
Step 4	**Configure display name.** Example: DisplayName = Joe Brown;	Configure the name to be displayed on the device for this line.

The following steps are used to configure line 2 for Joe's phone. This line rings when Bob is called, so it has Bob's authentication information.

Step	Command	Purpose
Step 1	**Configure line as shared.** ShareLine = 1;	Configure the line as "shared" (as opposed to "private").
Step 2	**Set Register User ID.** Example: UserName = 2405552222_2;	The register user ID must correspond with the line/port setting on BroadWorks.
Step 3	**Enable SIP Authentication.** Example: AuthName = bobsmith; password = bobs;	If the Authentication service is configured on BroadWorks, these parameters must be configured to match the BroadWorks settings. This line rings when Bob is called, so it has Bob's authentication information.
Step 4	**Configure display name.** Example: DisplayName = Bob Smith;	Configure the name to be displayed on the device for this line.

5 Device Management

The BroadWorks Device Management feature provides the capability to automate generation of device configuration files to support mass deployment of devices. This section identifies the device management capabilities supported by the Yealink SIP-TxP/T3xG and the configuration steps required. For Device Management configuration details not covered here, refer to the *BroadWorks Device Management Configuration Guide* [2].

The basic steps to integrate a device with Device Management are as follows:

1) Create device template files for the device with the appropriate BroadWorks Device Management tags.
2) Define custom and system tags and add them to the *device template* files. Note that these custom and system tags must also be defined on BroadWorks.
3) Create a device profile type on BroadWorks for each device model to be integrated with Device Management.
4) Add the device template files and other associated files to the device profile type.
5) Create a device profile instance of the device profile type and assign it to a user. A user name and password are assigned to this device profile.
6) The end device is configured with the Device Management URL for device files, as well as the user name/password access credentials.

This section describes the steps to integrate the Yealink SIP-TxP/T3xG phones.

As part of the Yealink SIP-TxP/T3xG CPE kit, BroadSoft has defined a standard device configuration in the device template files that service providers can use on their systems. These files can be uploaded directly to Device Management without modification. However, the service provider also has the option to modify these template files as required to fit their deployment needs.

The CPE kit also includes tools to help automate the integration effort. For releases after Release 17.0, there is a Device Management import/export utility. The CPE kit contains DTAF files that can be used to import the device type and template files.

5.1 Device Management Capabilities Supported

The Yealink SIP-TxP/T3xG has completed Device Management interoperability testing with BroadWorks using the *BroadWorks Device Management Interoperability Test Plan* [5]. The results are summarized in the following table.

The BroadWorks test plan is composed of packages, each covering distinct interoperability areas. Each package is composed of one or more test items, which in turn are composed of one or more test cases. The test plan exercises the Device Management interface between the device and BroadWorks with the intent to ensure interoperability.

The *Supported* column in the following table identifies the Yealink SIP-TxP/T3xG's support for each of the items covered in the test plan packages, with the following designations:

- Yes Test item is supported.
- No Test item is not supported.
- NA Test item is not applicable.

- NT Test item was not tested.

Caveats or clarifications are identified in the *Comments* column.

Note that *DUT* in the following table refers to the *Device Under Test,* which in this case is the Yealink SIP-TxP/T3xG.

BroadWorks Device Management Interoperability Test Plan Support Table			
Test Plan Package	**Test Plan Package Items**	**Supported**	**Comments**
HTTP File Download	HTTP Download Using Xsp IP Address	Yes	
	HTTP Download Using Xsp FQDN	Yes	
	HTTP Download Using Xsp Cluster FQDN	Yes	
	HTTP Download With Double Slash	Yes	
HTTPS File Download	HTTPS Download Using Xsp IP Address	Yes	Except T18P
	HTTPS Download Using Xsp FQDN	Yes	Except T18P
	HTTPS Download Using Xsp Cluster FQDN	Yes	Except T18P
File Inspection	Inspect System Config File	Yes	
	Inspect Device-Specific Config File	Yes	
	Inspect Other Config Files	Yes	
	Inspect Static Files	Yes	
Device Inspection	Inspect SIP Settings	Yes	
	Inspect Line Settings	Yes	
	Inspect Service Settings	Yes	
HTTP File Upload	HTTP Upload Using Xsp IP Address	No	
	HTTP Upload Using Xsp FQDN	No	
	HTTP Upload Using Xsp Cluster FQDN	No	
Call Processing Sanity Tests	Register with Authentication	Yes	
	Call Origination	Yes	
	Call Termination	Yes	
	Remote Restart	Yes	
	Shared Line Origination	Yes	Except T18P, T80P
	Shared Line Termination	Yes	Except T18P, T80P
	Shared Line Status	Yes	Except T18P, T80P
	Busy Lamp Field	Yes	Except T18P, T80P

5.2 Device Management Configuration

This section identifies the steps required to enable the Yealink SIP-TxP/T3xG phones for device management. For Device Management configuration details not covered here, see the *BroadWorks Device Management Configuration Guide* [2].

5.2.1 Configure BroadWorks Tags

The template files in Device Management use tags to represent the data stored on BroadWorks. When a configuration changes for a user, Device Management parses the template files and replaces the Device Management tags with the associated data stored on BroadWorks. There are default tags defined in the Device Management software and there are custom tags that the service provider can create/define via the web portal for use by Device Management. There are two types of custom tags that can be defined: system-default tags are common to all phones on the system; device-type-specific tags are common to Yealink phone models only.

The Yealink SIP-TxP/T3xG makes use of dynamic tags, which may be configured by a BroadWorks administrator as either system default or device type specific tags. This section identifies the required tags.

5.2.1.1 Create System Default Tags

Go to *System → Resources → Device Management Tag Sets* and select the *System Default* tag set. Add the system default tags in the following table if they do not already exist.

Tag Name	Valid Settings	Description
%SNTP_SERVER_1%	IP address/FQDN	NTP server address
%SNTP_SERVER_2%	IP address/FQDN	NTP server address alternate
%DNS_SERVER_1%	IP address	DNS server address
%DNS_SERVER_2%	IP address	DNS server address alternate
%SBC_ADDRESS%	IP address/FQDN	SBC SIP address
%SBC_PORT%	Port	SBC SIP port
%USE_SBC_BOOLEAN%	0/1	Use SBC: 1=yes, 0=no

Example System Default Tag settings:

Figure 2 System Default Tag Settings

5.2.1.2 Create Device Type Specific Tags

Browse to *System → Resources → Device Management Tag Sets* and select *Add* to add a new tag set. Configure the tag set name using the device name appended by *Tags*: *Yealink SIP-TxP Tags*. Add the device type specific tags in the following table to the device tag set. If the tag set already exists, ensure the tags are defined in the following table.

Tag Name	Valid Settings	Description
%COUNTRY%	United States Australia Austria Brazil Belgium China Czech Denmark Finland France Germany Great Britain Greece Hungary Lithuania India Italy Japan Mexico New Zealand Netherlands Norway Portugal Spain Switzerland Sweden Russia Chile Czech ETSI	Identifies country for standard ringtones.

Tag Name	Valid Settings	Description
%LANGUAGE%	English Chinese Simplified Chinese Traditional French German Italian Polish Portuguese Turkish Spanish	Web management and phone LCD language.
%T12_FIRMWARE%	5.<x.x.x>.rom Example: 5.51.0.10.rom	T12P FIRMWARE VERSION
%T18_FIRMWARE%	18.<x.x.x>.rom Example: 18.0.0.80.rom	T18P FIRMWARE VERSION
%T20_FIRMWARE%	9.<x.x.x>.rom Example: 9.51.0.10.rom	T20P FIRMWARE VERSION
%T21_FIRMWARE%	21.<x.x.x>.rom Example: 21.61.0.10.rom	T21P FIRMWARE VERSION
%T22_FIRMWARE%	7.<x.x.x>.rom Example: 7.51.0.10.rom	T22P FIRMWARE VERSION
%T26_FIRMWARE%	6.<x.x.x>.rom Example: 6.51.0.10.rom	T26P FIRMWARE VERSION
%T28_FIRMWARE%	2.<x.x.x>.rom Example: 2.51.0.10.rom	T28P FIRMWARE VERSION
%T80_FIRMWARE%	8.<x.x.x>.rom Example: 8.51.0.10.rom	T80P FIRMWARE VERSION
%T32_FIRMWARE%	32.<x.x.x>.rom Example: 32.0.0.40.rom	T32G FIRMWARE VERSION
%T38_FIRMWARE%	38.<x.x.x>.rom Example: 38.0.0.40.rom	T38G FIRMWARE VERSION

Example Device Type Specific Tag settings:

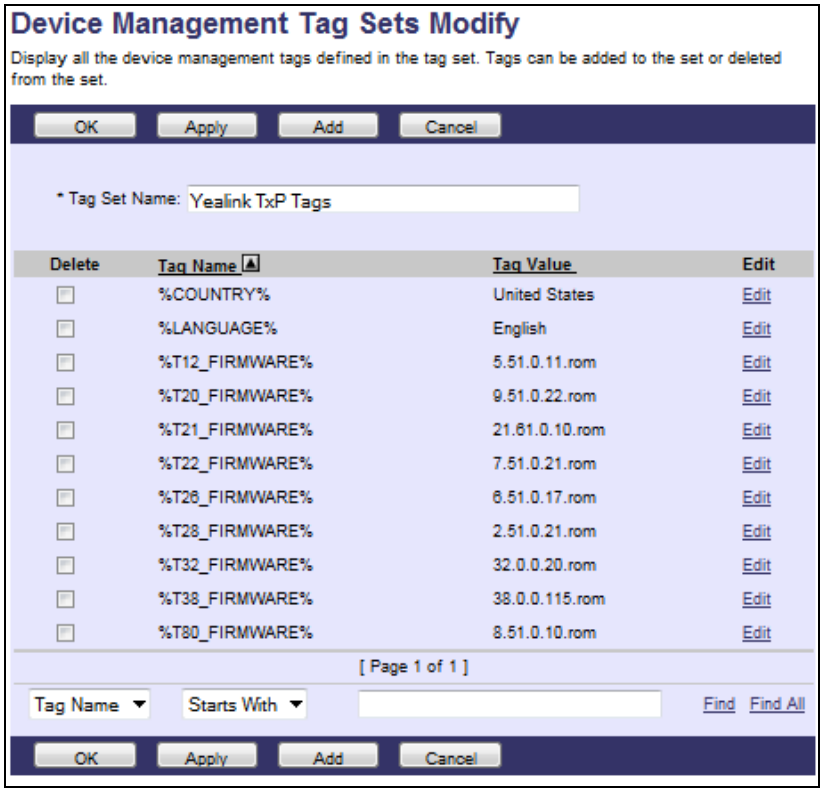

Figure 3 Device Type Specific Tag Settings

5.2.2 Configure BroadWorks Device Profile

The device profile type is a system-level structure that defines how the device interfaces with BroadWorks. It also identifies the default configuration files and other files, such as firmware, which are required for the phone to operate correctly. The device profile type is created by the system administrator. Group administrators use the device profile type to create a device profile. The device profile is an instance of the device profile type that is associated with a physical device or IP phone.

There are two BroadWorks device profile configuration methods described: Import and manual. The import method takes a Device Type Archive File (DTAF) as input and builds the BroadWorks device profile type(s) automatically. The manual method walks the administrator through the steps to manually add and configure the device profile type(s).

The import method should be used if all of the prerequisites are met:

- The BroadWorks Release is 17.0 or later.
- The device profile type(s) being imported do not already exist on the system. (If either a previous import or manual configuration was done, the import will fail.)
- There is a DTAF file available for import with a BroadWorks release level that is the same as or prior to the release being imported to. If the DTAF file is at a release level later than the release being imported to, the import may fail.

Otherwise, the manual method must be used.

5.2.2.1 Configuration Method 1: Import

This section identifies the steps necessary to make use of the Device Management import feature to configure BroadWorks to add the Yealink SIP-TxP/T3xG as a Device Management-enabled device type.

The import method is available in BroadWorks Release 17.0 and later. For previous releases, use the manual configuration method described in the next section.

Download the Yealink TxP/TxG CPE kit from the BroadSoft Xchange at www.broadsoft.com/xchange. Extract the DTAF files from the CPE kit. These are the import files. Repeat the following steps for each model you want to import.

Log in to BroadWorks as an administrator. Go to *System → Resources → Identity/Device Profile Types* and select *Import*. Select *Browse* to find the extracted DTAF file for the model and click **OK** to start the import.

After the import finishes, the following post-import configuration steps must be completed.

Go to *System → Resources → Identity/Device Profile Types* and perform a search to find the imported Yealink device profile type, for example, *Yealink T28P*. Go to the *Profile* page and change the Device Management Device Access FQDN to your Xsp or Xtended Services Platform cluster address.

Example:

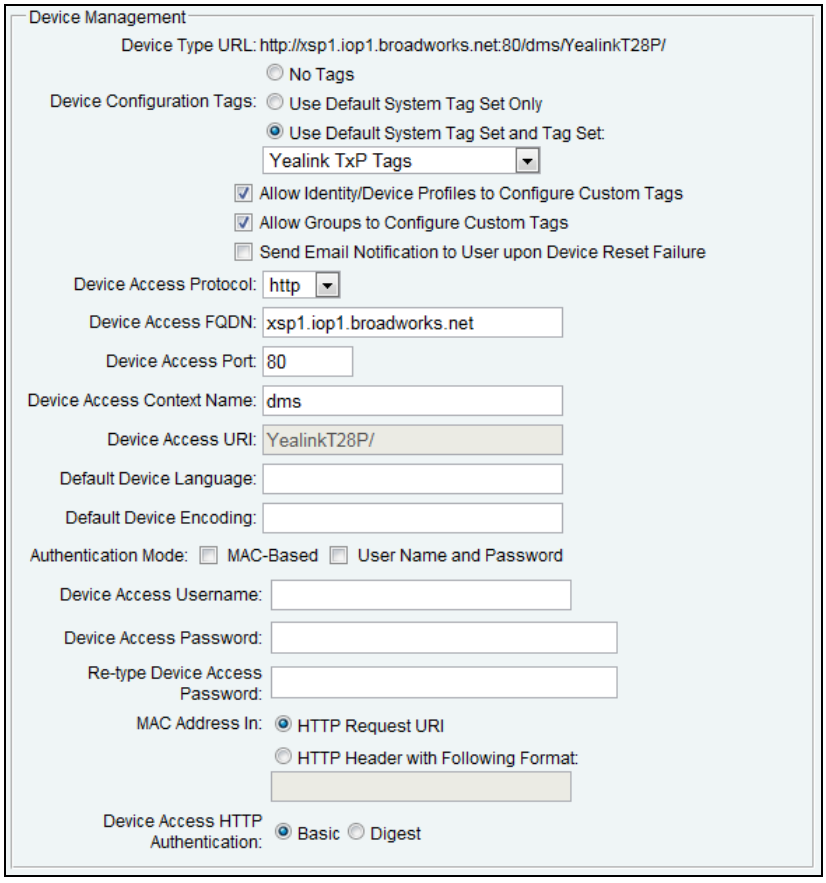

Figure 4 Device Access FQDN

Next, using the *Files and Authentication* link, select the option to rebuild all the system files.

Firmware files must be obtained from Yealink. These files are not included in the import. Complete the steps in section *5.2.2.2.2.3 Static Files* to define the static firmware files and to upload the firmware. Note that the non-firmware static files in section *5.2.2.2.2.3 Static Files* are included in the import.

After importing the DTAFs, the Application Server must be restarted to load the TimeZoneAlias files.

5.2.2.2 Configuration Method 2: Manual

This section identifies the manual steps necessary to configure BroadWorks to add the Yealink SIP-TxP/T3xG as a Device Management-enabled device type.

The manual method must be used for BroadWorks releases prior to Release 17.0. The manual method is an optional method in Release 17.0 and later. To determine when to use the manual method, see section *5.2.2 Configure BroadWorks Device Profile*. The steps in this section can also be followed to update previously imported or configured device profile type(s) with new configuration files and firmware.

The steps in this section must be completed for the device profile type for each Yealink SIP-TxP/T3xG model.

5.2.2.2.1 Modify Device Profile Type

This section identifies the BroadWorks device profile type settings relevant to Device Management for the Yealink SIP-TxP/T3xG.

Browse to *System → Resources → Identity/Device Profile Types* and perform a search to find the Yealink device profile type(s) created in section *3.1 BroadWorks Device Profile Configuration* or add the device profile type for each model using the settings from section *3.1 BroadWorks Device Profile Configuration* if they do not exist.

The *Standard Options* and *Advanced Options* should already be configured as specified in section *3.1 BroadWorks Device Profile Configuration*. If there are differences, update to match the settings in section *3.1 BroadWorks Device Profile Configuration*.

The following subsections identify the required settings specific to *Device Management*.

5.2.2.2.1.1 Configure Auto Configuration Options

If Device Management has been enabled previously for the device profile type(s), proceed to the next section.

Device Configuration is enabled differently depending on the deployed BroadWorks release.

For BroadWorks Release 18.0 and later, configure as described in the following table.

Parameter	Value	Description
Device Configuration Options	Device Management	Use BroadWorks Device Management.

The following screen capture shows Device Management enablement for BroadWorks Release 18.0 and later.

For BroadWorks releases prior to Release 18.0, configure as described in the following table. Note that these settings serve only to enable Device Management and are otherwise not meaningful in this context.

Parameter	Value	Description/Notes
Auto Configuration Type	2 Config File	This setting activates the Device Management configuration items. The *2 Config File* button has no relevance to Device Management, but only activates the setting field.
CPE System File Name	not_used	This field is not used by Device Management and should be set to "not_used".
Device File Format	not_used	This field is not used by Device Management and should be set to "not_used".

The following screen capture shows Device Management enablement for BroadWorks release prior to Release 18.0.

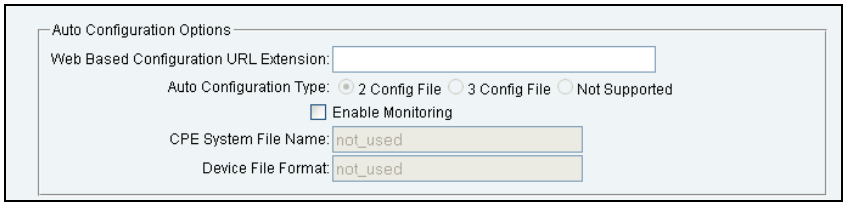

Figure 5 Auto Configuration Option Settings

5.2.2.2.1.2 Configure Device Management Options

Modify the device profile type *Device Management Options* as described in the following table. These are common settings that apply to all devices enabled for Device Management.

Parameters not identified in the following table can usually be left as the defaults.

Parameter	Value	Description/Notes
Device Configuration Tags	Use Default System Tag Set and Tag Set	Select the device tag set created in section *5.2.1.2 Create Device Type Specific Tags*.
Allow Identity/Device Profiles to Configure Custom Tags	checked	Optional
Allow Groups to Configure Custom Tags	checked	Optional
Device Access Protocol	http	
Device Access FQDN	<BroadWorks-Xsp-Cluster-Address> Example: xsp.iop1.broadworks.net	Set to the Xsp cluster FQDN if using an Xsp farm. Otherwise, set to the individual Xsp FQDN or IP address.
Device Access Port	<BroadWorks-Xsp-Port> Example: 80	Should be set to 80.

Parameter	Value	Description/Notes
Device Access Context Name	dms	This does not need to be defined. BroadWorks defaults to the system-defined value.
Device Access URI	<device model name> Example: YealinkT28P	This defines the directory the Xsp uses to access the configuration files.

Example Device Management Options settings:

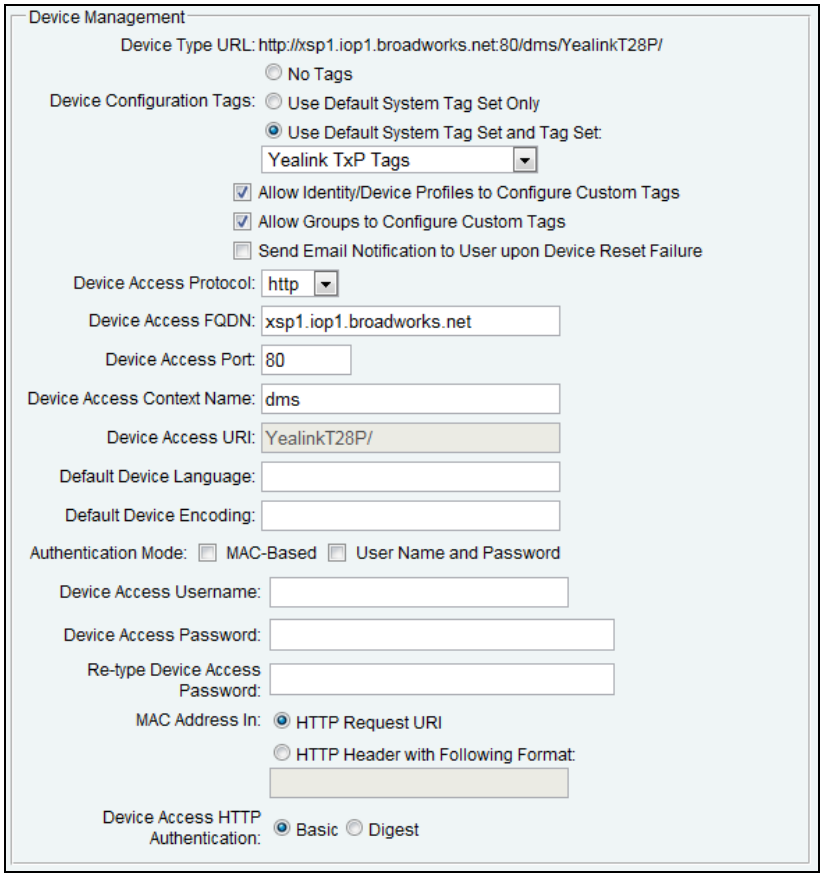

Figure 6 Device Management Options Settings

5.2.2.2.2 Define Device Profile Type Files

This section describes the BroadWorks Device Management configuration necessary to identify the configuration files and other files that the Yealink TxP/TxG downloads.

To define the files, configuration templates, firmware and other files the TxP uses, they must be uploaded to BroadWorks. Download the Yealink TxP/TxG CPE kit from BroadSoft Xchange at www.broadsoft.com/xchange. Extract the config files from the CPE kit. Obtain the firmware files directly from Yealink.

The following table identifies the Yealink configuration files distributed with the CPE kit.

File Name	CPE Kit Template File Name	File Type	Description
		System-level, Device-specific, Static, Time Zone Alias	
Examples:			

File Name	CPE Kit Template File Name	File Type	Description
BWMACADDRESS.cfg	%BWMACADDRESS%-T3xG.cfg.template %BWMACADDRESS%-TxP.cfg.template	Device-specific	**This file contains device specific parameters that the phone needs to load.**
y0000000000xx.cfg	y0000000000xx.cfg	System-level	This file contains system level parameters that the phone needs to load.
zhongguo.wav	Ring.wav	Static	Ringtone WAV format file.
lang+English.txt	lang+English.txt	Static	Default language file.
contactData.xml contactData1.xml	contactData.xml contactData1.xml	Static	This file contains the contact information in XML format. T3xG: contactData.xml TxP: contactData1.xml
DialPlan.xml	DialPlan.xml	Static	Specifies the dialing rules.
AutoDST.xml	AutoDST.xml	Static	Rules set of the beginning and end of Day Light Savings Time.
TimeZoneAliasLabels_Yealink+<*model*>.properties	TimeZoneAliasLabels_Yealink-<*model*>.properties	Time Zone Alias	The Time zone Alias file is a BroadWorks Device Management file used to map time zone identifiers between BroadWorks and Yealink phones. A Time zone Alias file is required for each model.
DialNow.xml	DialNow.xml	Static	Required for T38G and T32G. This data file specifies the dial now rules for the phone.
Dialing.xml	Dialing.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in the call failed calling state.
CallFailed.xml	CallFailed.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in the call failed calling state.
CallIn.xml	CallIn.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in the call alerting calling state.
Connecting.xml	Connecting.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in the call connecting state.
Ringback.xml	Ringback.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in the ring back state.
ScreenSaver.png	ScreenSaver.png	Static	Required for T38G and T32G. Picture in PNG format, used for screen saver purpose.

File Name	CPE Kit Template File Name	File Type	Description
Talking.xml	Talking.xml	Static	Required for T38G and T32G. This data file specifies the soft keys available on the phone in each of the in-session calling state.

The following table identifies other files that the Yealink TxP/TxG downloads from the server or uploads to the server. These files are not provided in the CPE kit and must be obtained from Yealink.

File Name	File Type	Description
x.x.x.x.rom	Static	Device firmware file.

Browse to *System → Resources → Identity/Device Profile Types → Files and Authentication* to add the files as described in the following subsections.

5.2.2.2.2.1 System File

This section identifies the system-level files used by Yealink and provides instructions for defining the files and uploading for Device Management.

Each TxP/T3xG model downloads a model-specific system file, named as follows:

- T12P: y000000000008.cfg
- T18P: y000000000009.cfg
- T20P: y000000000007.cfg
- T21P: y0000000000017.cfg
- T22P: y000000000005.cfg
- T26P: y000000000004.cfg
- T28P: y000000000000.cfg
- T32G: y000000000032.cfg
- T38G: y000000000038.cfg
- T80P: y000000000002.cfg

Add a BroadWorks device profile type file to each Yealink TxP/TxG device profile for the system file using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description/Notes
Device Access File Format	<system-file-name> Example: y000000000008.cfg	This is the file name the phone uses to request the file.
Repository File Format	<system-file-name> Example: y000000000008-%BWTIMESTAMP%.cfg	This is the file name as stored on the Device Management repository.
File Category	Dynamic Per-Type	Only one system file is generated for the profile type.
File Customization	Administrator	This identifies who can customize the system file template.
Assign File	Custom	
Authentication Mode	User Name and Password	This system file is authenticated with the user name and password.
Device Access HTTP Authentication	Digest	

After defining the system file type, upload the corresponding system file template downloaded from the BroadSoft Xchange. Use the *Browse* button on the file definition screen. Be sure to click on **Apply** after uploading the file.

Reminder: Complete these steps for each of the Yealink TxP/TxG models.

Example System File settings:

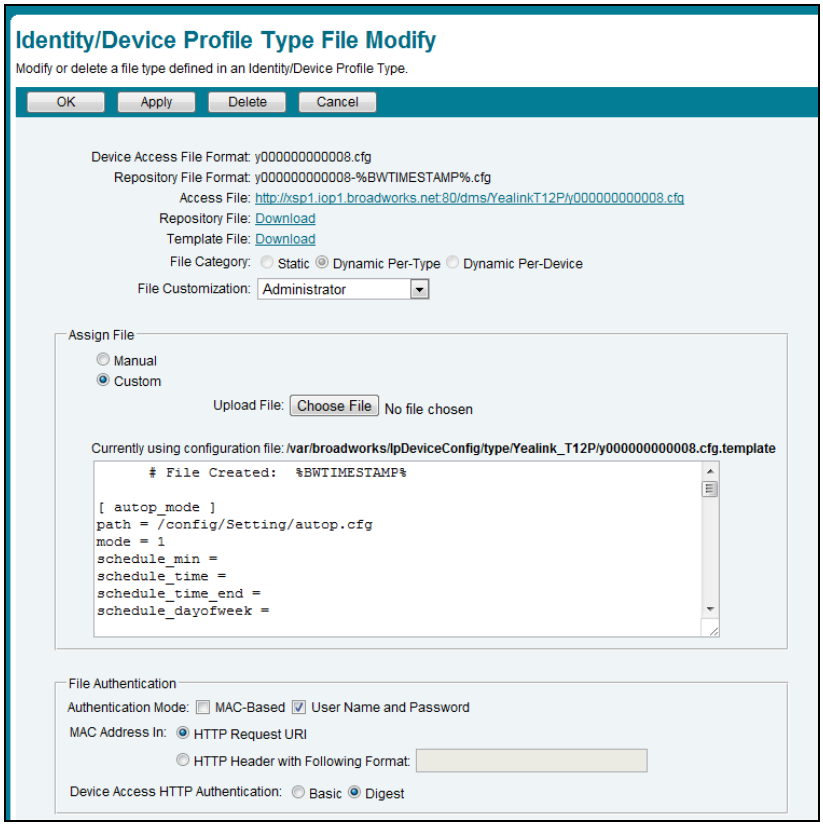

Figure 7 System File Settings

5.2.2.2.2.2 Device-Specific File

This section identifies the device-specific files used by Yealink and provides instructions for defining the files and uploading for Device Management.

Each TxP/T3xG phone downloads a phone-specific file based on the phone's MAC address using the following file name format:

<mac-address>.cfg

Add a BroadWorks device profile type file to each Yealink TxP/TxG device profile for the device-specific file using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description/Notes
Device Access File Format	%BWMACADDRESS%.cfg	This is the file name format the phone uses to request the file.
Repository File Format	%BWFQDEVICEID%.cfg	This is the file name format as stored on the Device Management repository.
File Category	Dynamic Per-Device	This file is unique per device.
File Customization	Administrator and User	This identifies who can customize this file template.
Assign File	Custom	
Authentication Mode	User Name and Password	The phone-specific file is authenticated with the user name and password.
Device Access HTTP Authentication	Digest	

After defining the device-specific file type, upload the corresponding device-specific file template downloaded from the BroadSoft Xchange. Use the *Browse* button on the file definition screen. Be sure to click on **Apply** after uploading the file.

Select the appropriate device-specific file to upload based on the model as follows:

- TxP models: %BWMACADDRESS%-TxP.cfg
- T3xG models: %BWMACADDRESS%-T3xG.cfg

Example Device-Specific File settings:

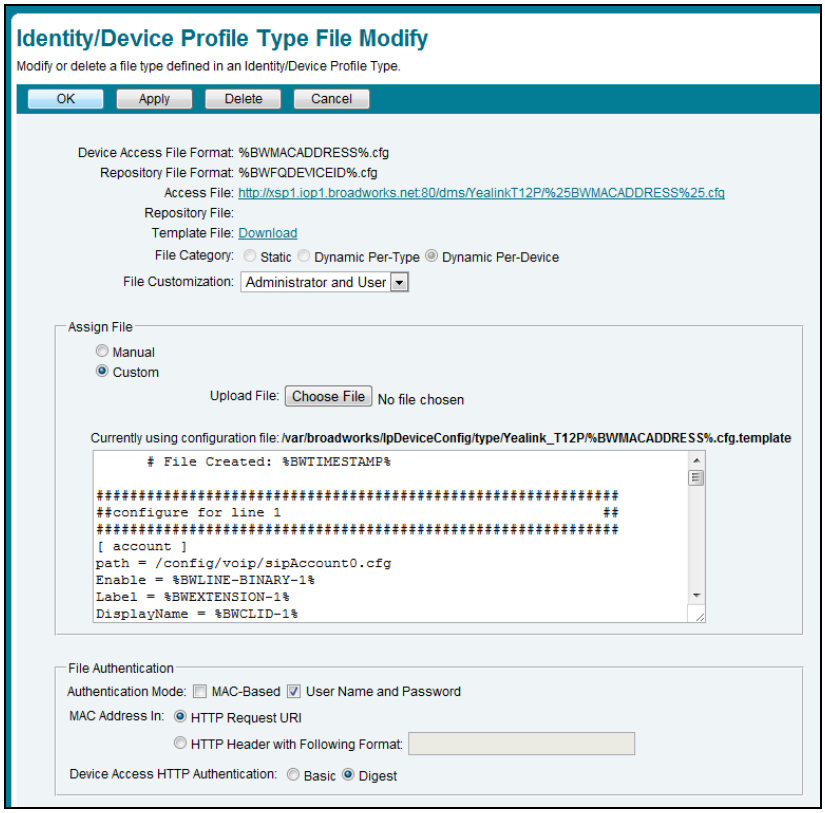

Figure 8 Device Specific File Settings

5.2.2.2.2.3 Static Files

Static files are files such as firmware and media files that are not configurable and/or do not make use of the dynamic BroadWorks Device Management tags. The Yealink TxP/TxG requires the following static files:

- <firmware-version>.rom
- Ring.wav
- lang+English.txt (or other default language file)
- contactData1.xml (contactData.xml for Yealink T38G and T32G)
- AutoDST.xml
- DialPlan.xml

The Yealink T38G and T32G require the following additional static files:

- DialNow.xml
- Dialing.xml
- CallFailed.xml
- CallIn.xml
- Connecting.xml
- Ringback.xml
- ScreenSaver.png
- Talking.xml

Each TxP model requires a different firmware file.

Add a BroadWorks device profile type file to each Yealink TxP/TxG device profile for each of the static files using the settings described in the following table.

Parameters not identified in the following table can usually be left as defaults.

Parameter	Value	Description/Notes
Device Access File Format	<file-name> Example: 5.50.0.10.rom	This is the file name the phone uses to request the file.
Repository File Format	<file-name> Example: 5.50.0.10.rom	This is the file name as stored on the Device Management repository. Use the same name as the actual file name.
File Category	Static	This is a static file. There are no dynamic tags in the file.
File Customization	Disallow	This file must not be modified.
Assign File	Custom	
Authentication Mode	Not set	The static files are not authenticated so do not select either of the options.

After defining the static file types, upload the corresponding static files. Firmware must be obtained from Yealink. The other files are available from the BroadSoft Xchange. Use the *Browse* button on the file definition screen. Be sure to click **Apply** after uploading the file.

Reminder: Repeat these steps for each Yealink model.

Example Static File settings:

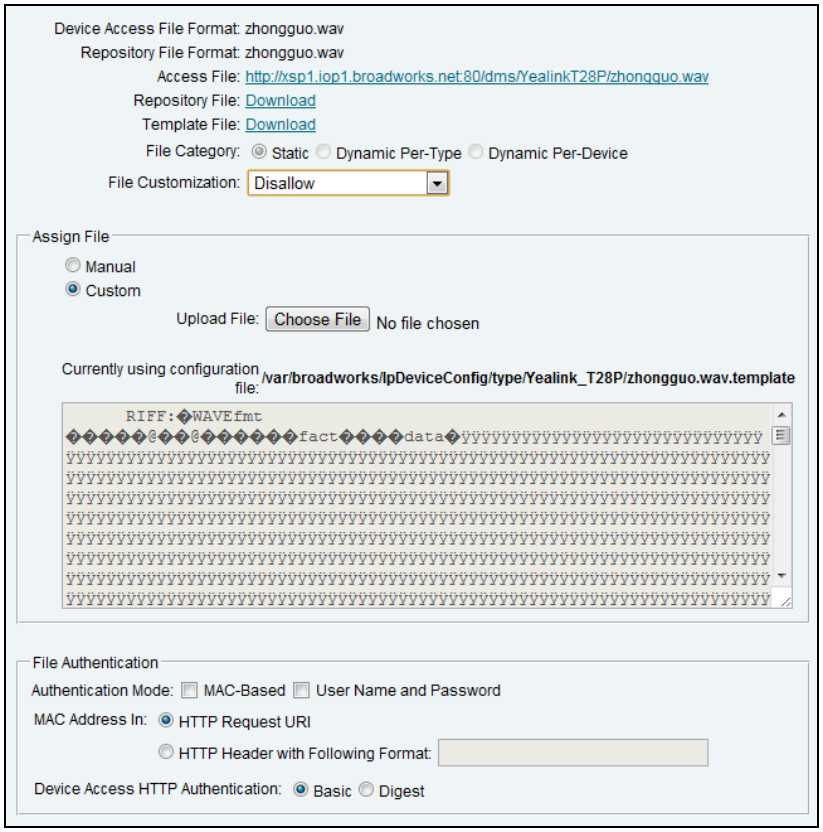

Figure 9 Static File Settings

5.2.2.2.2.4 Time Zone Alias File

To properly map the BroadWorks configured user time zone to the Yealink phone setting, a mapping file must be created on the BroadWorks system. This file maps the BroadWorks time zone settings to the phone's time zone settings. Adding this mapping file for the device profile type is described in the *BroadWorks Device Management Configuration Guide* [2].

This time zone mapping file must be added to the */usr/local/broadworks/bw_base/conf/dms* directory on the Application Server using the following file name format:

TimeZoneAliasLabels_<Device_Type_Name>.properties

For example, if the device type name is *Yealink T28P,* the time zone mapping file name must be *TimeZoneAliasLabels_Yealink+T28P.properties*. (A space in the device name must be converted to a "+" in the file name.)

The file must contain the mapping of BroadWorks time zones values to Yealink time zone values. The following is an example of the file contents:

```
US_ALASKA=-9
US_HAWAII=-10
CANADA_PACIFIC_TIME=-8
US_PACIFIC_TIME=-8
US_ARIZONA=-7
CANADA_MOUNTAIN_TIME=-7
US_MOUNTAIN_TIME=-7
CANADA_CENTRAL_TIME=-6
US_CENTRAL_TIME=-6
CANADA_EASTERN_TIME=-5
US_INDIANA=-5
US_EASTERN_TIME=-5
CANADA_ALTANTIC_TIME=-4
CANADA_NEWFOUNDLAND=-3.5
```

This file should contain all the time zones supported by the Service Provider's BroadWorks system. The Application server must be restarted to load this file.

The CPE kit contains the time zone properties files defined for the continental U.S. and Canadian time zones. For other time zone settings, refer to the *Yealink TxP SIP Phone User Manual* [1]. When using the DTAF import, the TimeZoneAlias files are automatically copied onto the system.

The BroadWorks Application Server must be restarted for the TimeZoneAlias files to be picked up by the system

5.2.3 Create Device Profile Instance

The previous sections defined the device profile type such that the system is ready to mass deploy device profiles. A device profile is an instance of the device profile type and defines the BroadWorks interface to a Yealink phone deployed at a user's desk.

This section describes how to create a BroadWorks device profile instance for an individual Yealink SIP-TxP/T3xG phone. Device profile instances are normally created at the BroadWorks Group level and assigned to users.

When the device profile is created, the authentication data must be defined. The authentication data is used by Device Management to challenge a request from a phone to download a configuration file. The device must send credentials that match the credentials stored in the device profile.

Browse to the BroadWorks *<group>* → *Resources* → *Identity/Device Profiles* and select *Add* to add a new Yealink SIP-TxP/T3xG device profile. Define the device profile instance using the settings described in the following table.

Parameters not identified in the following table can normally be left as defaults.

Parameter	Value	Description/Notes
Identity/Device Profile Name	<device-profile-name> Example: Yealink T28 - 01	The device profile name is a unique identifier for the device profile instance.
Identity/Device Profile Type	<yealink-txp-device-profile-type> Example: Yealink T28P	From the drop-down list, select the Yealink device profile type created in the previous section.
Authentication	Use Custom Credentials	Use a unique login user name and password for each phone.
Device Access User Name	<phone-login-name> Example: bsmith	The phone login user naming convention must be determined by the service provider.
Device Access Password	<phone-login-password> Example: bsmith456	

Example Identity/Device Profile Add settings:

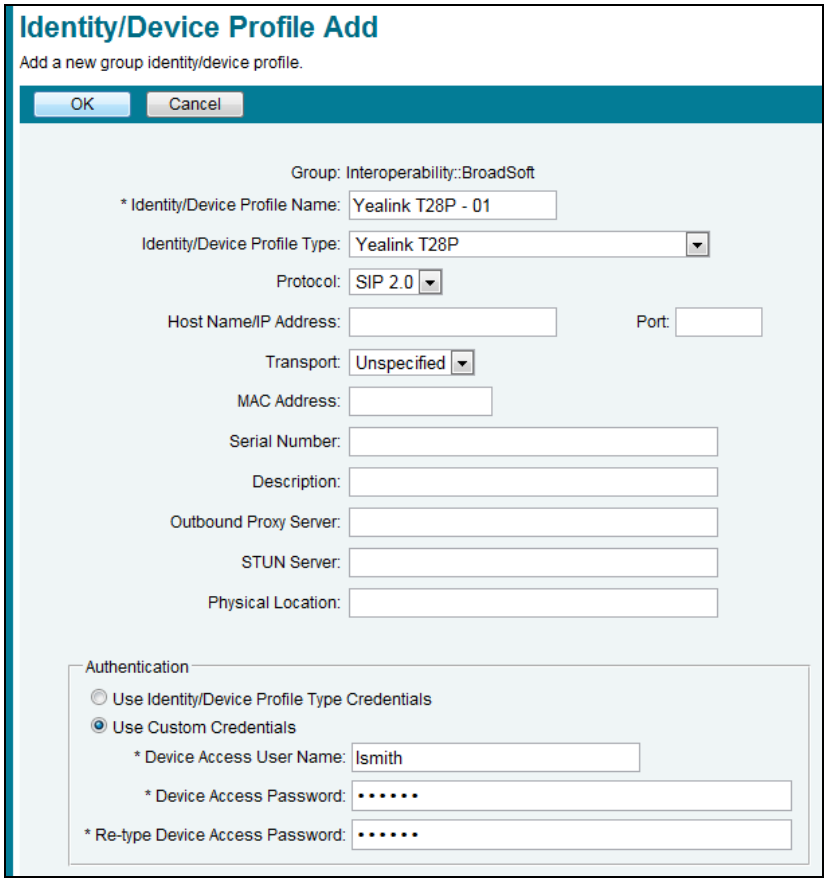

Figure 10 Identity/Device Profile Add Settings

5.2.4 Configure BroadWorks User

The user should be configured with the desired BroadWorks configuration and services. Any services that require a specific configuration on the device are managed via Device Management and defined in the device configuration files, given that the template files are created with the correct Device Management tags.

The device profile created in the previous section should be assigned to the BroadWorks user. Assigning the device profile to the user automatically causes the Device Management feature to generate the device configuration files for this user's device.

To assign the device profile to the user, browse to the BroadWorks *<user>* → *Addresses* page and set the parameters as described in the following table.

It is expected that parameters not identified in the following table are already set or are self-explanatory.

Parameter	Value	Description/Notes
Identity/Device Profile Name	<device-profile-name> Example: yealink	Select from the drop-down the device profile instance created in the previous section.

Parameter	Value	Description/Notes
Line/Port	<SIP register address-of-record> Example: 8881001099@as.iop1.broadworks.net	Supply the desired SIP register address-of-record.

Example user *Addresses* settings:

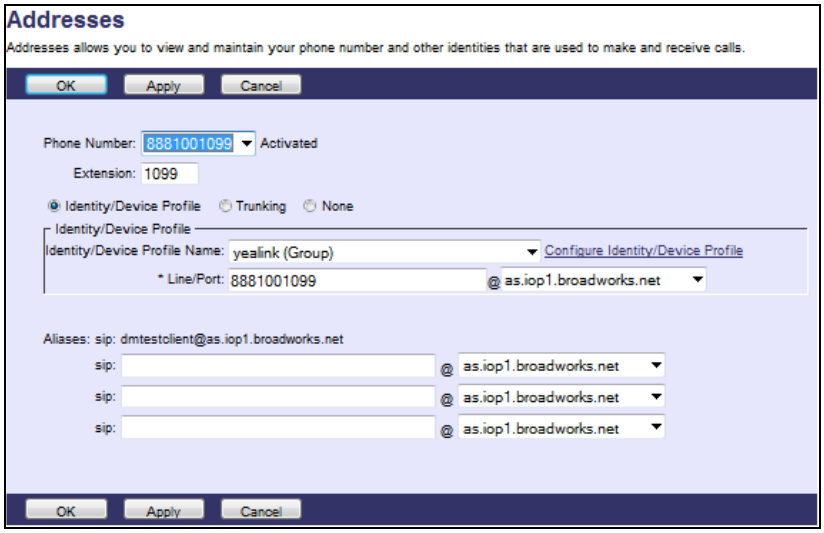

Figure 11 Addresses Settings

5.2.5 Configure Edge Device

In many deployments, an edge device is deployed on the enterprise edge. Configure the edge device SIP server setting with the service provider's session border controller IP address or FQDN. If there is no edge device and the phones communicate directly with the service provider's SBC, skip this section.

To integrate the edge device with Device Management, the SBC address tag (%SBC_ADDRESS%) defined in section *5.2.1.1 Create System Default Tags* must be overridden at the group level with the LAN address of the edge device. At the *Group → Utilities → Device Configuration* page, select the Yealink device profile (example: Yealink T28P). Perform the following steps.

1) Click on the *Custom Tags* tab.
2) Click the **Add** button.
3) Add the *SBC* tag.
4) Enter "SBC_ADDRESS" as the tag.
5) Enter the IP address as the value (edge device LAN IP address).
6) Click **OK** to save the tag data.

This Tag/Value will be applied to all Yealink phones in the group using the modified *Device Profile Type*.

Repeat for each Yealink model provisioned in the group.

5.2.6 Configure Yealink TxP

This section describes the steps necessary to configure the Yealink TxP/TxG to integrate with BroadWorks Device Management.

Log in to the web user interface for the TxP phone (https://<phone-ip-address>). Go to the *Upgrade* web page and set the following:

- Check New Config – Power On
- URL – Device Management server (Xtended Services Platform) device address URL

  Example: http(s)://xsp1.broadworks.net:80/dms/Yealink_T28P/
- Account – BroadWorks Device Access User Name

  Example: lsmith
- Password – BroadWorks Device Access Password

  Example: 123456

Restart the phone to force the phone to download the Device Management configuration files and firmware.

Example Login (Default User Name/Password is admin/admin):

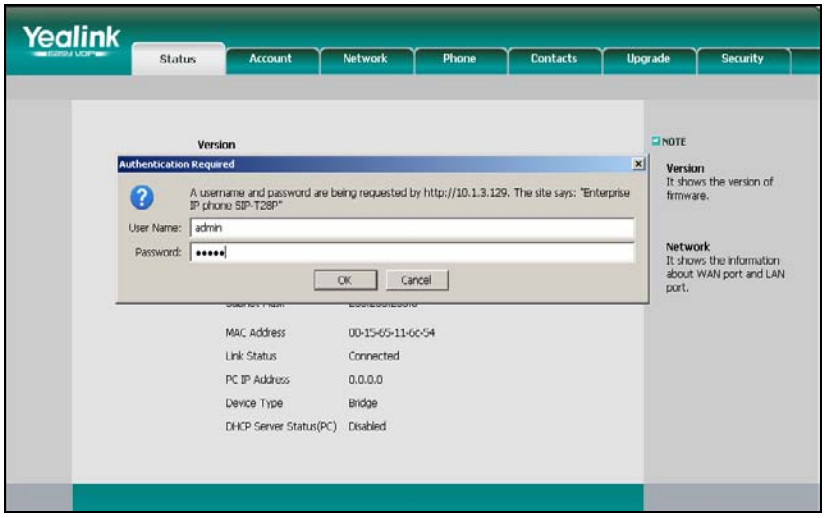

Figure 12 Login Screen

Example Upgrade screen:

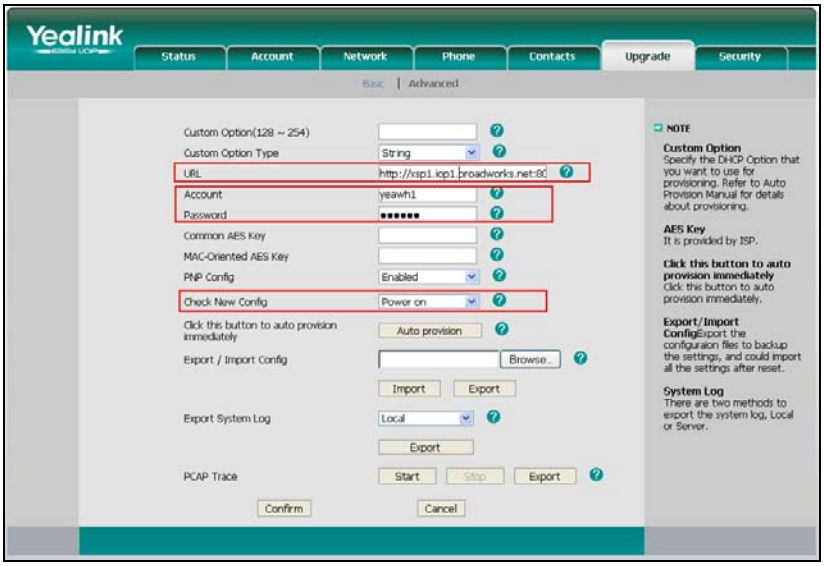

Figure 13 Upgrade Screen

5.3 Upgrading from Previous CPE Kits

The configuration sections above are primarily structured around importing or manually configuring the Yealink device profile types for the first time. Many of the steps are unnecessary when upgrading to a new firmware release or CPE kit version.

5.3.1 General Recommendations for Upgrades

Upgrades can be resource intensive if not managed properly. Recommendations for a managed upgrade include:

- Perform the upgrade in a maintenance window.
- Keep the previous firmware on the system in case a downgrade is required. Older versions can be deleted.
- Perform the upgrade by group rather than system-wide. To do so:

1) Upload firmware at the system level.
2) Select the group to upgrade.
3) Select *Utilities → Device Configuration*.
4) Search for and select the Yealink model to upgrade.
5) Select Custom Tags. Add/Update the relevant device tags to reflect the target upgrade release firmware name/revision.
6) Select Files. Upload the new or updated config files at the group level. (Refer to relevant upgrade section to identify new or modified configuration files.)
7) On the *Files* page, select *Rebuild the files*. This rebuilds all the configuration files associated with the selected Yealink device profile type in this group
8) On the *Files* page, select *Reset the phones*. This causes the phones to restart and pick up new firmware and configuration files.

9) Repeat steps two through seven for each Yealink model in the group to upgrade.

- After all groups have been upgraded, complete the following steps to update the system device profile types and reset the group device profile types to defaults.

1) Browse to *System → Resources →Identity/Device Profile Types*. Search for and select the Yealink model device type. Upload the new or updated configuration files at the group level. (Refer to relevant upgrade section to identify new or modified configuration files.) Repeat for each Yealink model.

2) For each group, browse to *Utilities → Device Configuration.* Search for and select the upgraded Yealink model. Select *Files* and set each updated file back to *Default*. Repeat for each Yealink model.

Appendix A: Sample SIP-TxP Configuration Files

NOTE: The following samples are examples and should be used as a reference only. DO NOT CUT AND PASTE THESE EXAMPLES TO GENERATE YOUR CONFIGURATION FILES. Use the configuration files obtained from Yealink with the specific release to generate your configuration files.

System Default File: y0000000000xx.cfg

NOTE: This is an example file and should be used for reference only.

```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Network Settings                                                 # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ WAN ]
path = /config/Network/Network.cfg
WANType = 0

[ LAN ]
path = /config/Network/Network.cfg
LANTYPE = 1
RouterIP =
LANSubnetMask =
EnableDHCP = 1
DHCPStartIP = 10.0.0.10
DHCPEndIP = 10.0.0.100

[ VLAN ]
path = /config/Network/Network.cfg
#ISVLAN,VID and USRPRIORITY are used for VLAN on LAN port
#PC_PORT_VLAN_ENABLE,PC_PORT_VID and PC_PORT_PRIORITY are used for PC
port
ISVLAN = 0
VID =
USRPRIORITY =
PC_PORT_VLAN_ENABLE = 0
PC_PORT_VID = 0
PC_PORT_PRIORITY = 0

[ QOS ]
path = /config/Network/Network.cfg
SIGNALTOS = 40
RTPTOS = 40


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Time Settings                                                    # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ Time ]
path = /config/Setting/Setting.cfg
TimeZone = %TIMEZONE%
TimeZoneName = %TIMEZONENAME%
TimeServer1 = %SNTP_SERVER_1%
TimeServer2 = %SNTP_SERVER_2%
```

```
Interval = 1000
SummerTime = 2
DSTTimeType = 0
TimeZoneInstead = 8
StartTime = 1/1/0
EndTime = 12/31/23
TimeFormat = 1
DateFormat = 0
OffSetTime = 60


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Feature Settings                                                   # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ Features ]
path = /config/Features/Phone.cfg
Call_Waiting = 1
Hotlinenumber =
BusyToneDelay = 3
LCD_Logo = 1
DND_Code = 480
Refuse_Code = 486
DND_On_Code = %BWFAC-DND-ACTIVATE-1%
DND_Off_Code = %BWFAC-DND-DEACTIVATE-1%
ButtonSoundOn = 1
CallCompletion = 0
AllowIntercom  = 1
IntercomMute  = 0
IntercomTone  = 1
IntercomBarge = 1
Call_WaitingTone = 1
Hotlinedelay = 4
BroadsoftFeatureKeySync  = 1


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Updating firmware Settings                                         # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ firmware ]
path = /tmp/download.cfg
server_type =
server_ip =
server_port = 80
login_name =
login_pswd =
http_url   =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVI
CEACCESSURI%/
firmware_name =%FIRMWARE_VERSION%
## Firmware Version for Yealink T28


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # #Updating File Settings                                            # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ ringtone ]
path = /tmp/download.cfg
server_address =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVI
CEACCESSURI%//xxx.wav
```

```
[ Lang ]
path = /tmp/download.cfg
server_address =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVI
CEACCESSURI%/lang+(-)xxx.txt

[ ContactList ]
path = /tmp/download.cfg
server_address =
http://%BWDEVICEACCESSFQDN%:%BWDEVICEACCESSPORT%/%BWDMSCONTEXT%/%BWDEVI
CEACCESSURI%/contactData1.xml


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Autoprovision Settings                                           # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ autoprovision ]
path = /config/Setting/autop.cfg
mode = 1
server_address = http://xsp1.iop1.broadworks.net:80/dms/Yealink-TxP_dm/
user = yealink
password = 123456

[ PNP ]
path = /config/Setting/autop.cfg
Pnp = 1


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Other Settings                                                   # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ Trans ]
path = /config/Features/Phone.cfg
IsOnHookTrans = 1

[ AutoRedial ]
path = /config/Features/Phone.cfg
EnableRedial = 0
RedialInterval = 10
RedialTimes = 10

[ PoundSend ]
path = /config/Features/Phone.cfg
Enable = 1
###### “#” key as send: 1 , ”*”key as send:2

 [ ReplaceRule ]
path =  /config/Setting/AdvSetting.cfg
ReplaceAll = 1
```

Phone-Specific File: %BWMACADDRESS%.cfg

NOTE: This is an example file and should be used for reference only.

```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account1 Registration Settings(T18P support 1 account only)     # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount0.cfg
Enable = %BWLINE-BINARY-1%
Label = %BWEXTENSION-1%
DisplayName = %BWCLID-1%
AuthName = %BWAUTHUSER-1%
UserName = %BWLINEPORT-1%
password = %BWAUTHPASSWORD-1%
SIPServerHost = %BWHOST-1%
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-1%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account1 Function Settings                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount0.cfg
ShareLine = %BWSHAREDLINE-1%
conf-type = 2
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-1%
[ blf ]
path = /config/voip/sipAccount0.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-1%

[ Account0 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
Server =
Port =
UserName =
PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account1 Feature Settings                                        # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-1%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%
```

```
[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account2 Registration Settings(T21P/T20P support 2 accounts only) #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount1.cfg
Enable = %BWLINE-BINARY-2%
Label = %BWEXTENSION-2%
DisplayName = %BWCLID-2%
AuthName = %BWAUTHUSER-2%
UserName = %BWLINEPORT-2%
password = %BWAUTHPASSWORD-2%
SIPServerHost = %BWHOST-2%
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-2%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account2 Function Settings                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount1.cfg
ShareLine = %BWSHAREDLINE-2%
conf-type = 2
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-2%
[ blf ]
path = /config/voip/sipAccount0.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-2%

[ Account1 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
Server =
Port =
UserName =
PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account2 Feature Settings   (T21P support account1 only)        # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
```

```
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-1%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%

[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account3 Registration Settings(T22/T26P support 3 accounts only)  #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount2.cfg
Enable = %BWLINE-BINARY-3%
Label = %BWEXTENSION-3%
DisplayName = %BWCLID-3%
AuthName = %BWAUTHUSER-3%
UserName = %BWLINEPORT-3%
password = %BWAUTHPASSWORD-3%
SIPServerHost = %BWHOST-3%
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-3%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account2 Function Settings                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount2.cfg
ShareLine = %BWSHAREDLINE-3%
conf-type = 2
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-3%
[ blf ]
path = /config/voip/sipAccount2.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-3%

[ Account2 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
```



```
Server =
Port =
UserName =
PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account3 Feature Settings                                              # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-1%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%

[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account4 Registration Settings                                         # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount3.cfg
Enable = %BWLINE-BINARY-4%
Label = %BWEXTENSION-4%
DisplayName = %BWCLID-4%
AuthName = %BWAUTHUSER-4%
UserName = %BWLINEPORT-4%
password = %BWAUTHPASSWORD-4%
SIPServerHost = %BWHOST-4%
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-4%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account4 Function Settings                                             # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount3.cfg
ShareLine = %BWSHAREDLINE-4%
conf-type = 2
```



```
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-4%
[ blf ]
path = /config/voip/sipAccount3.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-4%

[ Account3 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
Server =
Port =
UserName =
PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account4 Feature Settings                                              # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-1%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%

[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account5                                                               # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount4.cfg
Enable = %BWLINE-BINARY-5%
Label = %BWEXTENSION-5%
DisplayName = %BWCLID-5%
AuthName = %BWAUTHUSER-5%
UserName = %BWLINEPORT-5%
password = %BWAUTHPASSWORD-5%
SIPServerHost = %BWHOST-5%
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-5%
```



```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account5 Function Settings                                              # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount4.cfg
ShareLine = %BWSHAREDLINE-5%
conf-type = 2
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-5%
[ blf ]
path = /config/voip/sipAccount4.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-5%

[ Account4 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
Server =
Port =
UserName =
PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account5 Feature Settings                                               # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-1%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%

[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account6 Registration Settings (SIP T28P only)                          # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount5.cfg
Enable = %BWLINE-BINARY-6%
Label = %BWEXTENSION-6%
DisplayName = %BWCLID-6%
AuthName = %BWAUTHUSER-6%
UserName = %BWLINEPORT-6%
password = %BWAUTHPASSWORD-6%
SIPServerHost = %BWHOST-6%
```



```
SIPServerPort = 5060
UseOutboundProxy = %USE_SBC_BOOLEAN%
OutboundHost = %SBC_ADDRESS%
OutboundPort = %SBC_PORT%
Transport = %SIP_TRANSPORT%
AnonymousCall = 0
RejectAnonymousCall = 0
MissedCallLog = 1
AutoAnswer = 0
VoiceMail = %BWVOICE-PORTAL-NUMBER-6%

[ Account5 ]
path = /config/Contacts/BroadSoft.cfg
DisplayName =
Server =
Port =
UserName =
PassWord =


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account6 Function Settings                                             # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
path = /config/voip/sipAccount5.cfg
ShareLine = %BWSHAREDLINE-6%
conf-type = 2
conf-uri =%BWNETWORK-CONFERENCE-SIPURI-6%
[ blf ]
path = /config/voip/sipAccount5.cfg
SubscribePeriod = 1800
BLFList_URI = %BWBLF-USER-6%


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account6 Feature Settings                                              # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ AlwaysFWD ]
path = /config/Features/Forward.cfg
Enable = %BWCFA-BINARY-6%
Target =
On_Code = %BWFAC-CFA-ACTIVATE-1%
Off_Code = %BWFAC-CFA-DEACTIVATE-1%

[ BusyFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
On_Code = %BWFAC-CFB-ACTIVATE-1%
Off_Code = %BWFAC-CFB-DEACTIVATE-1%

[ TimeoutFWD ]
path = /config/Features/Forward.cfg
Enable =
Target =
Timeout =
On_Code = %BWFAC-CFNA-ACTIVATE-1%
Off_Code = %BWFAC-CFNA-ACTIVATE-1%
```

Appendix B: Sample SIP-T3xG Configuration Files

NOTE: The following samples are examples and should be used as a reference only. DO NOT CUT AND PASTE THESE EXAMPLES TO GENERATE YOUR CONFIGURATION FILES. Use the configuration files obtained from Yealink with the specific release to generate your configuration files.

System Default File: y0000000000xx.cfg

NOTE: This is an example file and should be used for reference only.

```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Network Settings                                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/system.ini,reboot=1 ]
Network.eWANType = 0
Network.strWANIP =
Network.strWANMask =
Network.strWanGateway =
Network.strWanPrimaryDNS = %DNS_SERVER_1%
Network.strWanSecondaryDNS = %DNS_SERVER_2%
Network.strPPPoEUser =
Network.strPPPoEPin =
Network.bBridgeMode = 1
Network.strLanIP = 10.0.0.1
Network.strLanMask = 255.255.250.0
Network.bLanDHCPServer = 1
Network.strDHCPClientBegin = 10.0.0.10
Network.strDHCPClientEnd = 10.0.0.100
Network.strDHCPLease = 3600
VLAN.ISVLAN = 0
VLAN.VID = 0
VLAN.USRPRIORITY = 0
VLAN.CFI = 0
VLAN.PC_PORT_VLAN_ENABLE = 0
VLAN.PC_PORT_VID = 0
VLAN.PC_PORT_PRIORITY = 0
LLDP.EnableLLDP = 0
LLDP.PacketInterval = 120

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Time Settings                                                          # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/system.ini,reboot=1 ]
LocalTime.TimeZone = %TIMEZONE%
LocalTime.TimeZoneName = %TIMEZONENAME%
LocalTime.TimeServer1 = %SNTP_SERVER_1%
LocalTime.TimeServer2 = %SNTP_SERVER_2%
LocalTime.Interval = 1000
LocalTime.TimeZoneInstead = 8
LocalTime.StartTime = 1/1/0
LocalTime.EndTime = 12/31/23
LocalTime.TimeFormat = 1
LocalTime.DateFormat = 0
```

```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Feature Settings                                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/user.ini,reboot=0 ]
Features.Call_Waiting = 1
Features.EnableHotline = 0
Features.Callpickup =
Features.Hotlinenumber =
Features.Hotlinedelay = 4
Features.SendDTMFType = 1
Features.BusyToneDelay = 0
Features.LCD_Logo = 0
Features.DND_Code = 480
Features.Refuse_Code = 486
Features.CallCompletion = 0
Features.AllowIntercom  = 1
Features.IntercomMute  = 0
Features.IntercomTone  = 1
Features.IntercomBarge  = 1
Features.Call_WaitingTone = 1
Features.ButtonSoundOn = 1
Features.BroadsoftFeatureKeySync  = 0
Features.FWD_Code = 302
Features.PswPrefix =
Features.PswLength =
Features.PswDialEnable = 0
Features.SaveCallHistory = 1
Features.HistorySaveDisplay = 1
Phone-DND.DND = 0
Phone-DND.DND_On_Code = %BWFAC-DND-ACTIVATE-1%
Phone-DND.DND_Off_Code = %BWFAC-DND-DEACTIVATE-1%
Trans.IsOnHookTrans = 1
PoundSend.Enable = 1

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Updating firmware Settings                                             # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ rom:Firmware]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/%T38_FIR
MWARE%

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # #Updating File Settings                                                 # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ bin:/phone/config/ContactData.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%//%BWDEVICEACCESSURI%/Contact
Data.xml

[ bin:/phone/config/lang/lang+English.txt ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%//%BWDEVICEACCESSURI%/lang+En
glish.txt

[ bin:/phone/config/AutoDST.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/AutoDST.
xml
```



```
[ bin:/phone/config/DialNow.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/DialNow.
xml

[ bin:/phone/config/DialPlan.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/DialPlan
.xml

[ bin:/phone/userdata/ringtone/Ring.wav ]
url=http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/Ring
.wav

[ bin:/phone/config/vpPhone/Dialing.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/Dialing.
xml

[ bin:/phone/config/vpPhone/CallFailed.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/CallFail
ed.xml

[ bin:/phone/config/vpPhone/CallIn.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/CallIn.x
ml

[ bin:/phone/config/vpPhone/Connecting.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/Connecti
ng.xml

[ bin:/phone/config/vpPhone/RingBack.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/RingBack
.xml

[ bin:/phone/config/vpPhone/Talking.xml ]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/Talking.
xml

[ bin:/phone/userdata/ScreenSaver/IMG.png]
url =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/ScreenSa
ver.png


# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Autoprovision Settings                                          # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/system.ini,reboot=1 ]
AutoProvision.bEnablePowerOn = 1
AutoProvision.bEnableWeekly = 0
AutoProvision.strWeeklyMask = 0123456
AutoProvision.strWeeklyBeginTime = 00:00
AutoProvision.strWeeklyEndTime = 00:00
AutoProvision.bEnableRepeat = 0
AutoProvision.nRepeatMinutes = 1440
AutoProvision.bEnablePNP = 1
```

```
AutoProvision.strPNPMulticastIP = 224.0.1.75
AutoProvision.bEnableDHCPOption = 1
AutoProvision.listUserOptions =
AutoProvision.listSystemOptions = 66,43
AutoProvision.strCommName = y000000000038.cfg
AutoProvision.strServerURL =
http://%BWDEVICEACCESSFQDN%/%BWDMSCONTEXT%/%BWDEVICEACCESSURI%/
AutoProvision.strKeyAES16 =
AutoProvision.strKeyAES16MAC =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Other Settings                                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/vpPhone/vpPhone.ini ]
memory1.Line =0
memory1.type = N/A
memory1.Value = %BWEXTENSION-1%
memory1.KEY_MODE = Asterisk
memory1.HotNumber =
memory1.HotLineId = 1
memory1.Callpickup =
memory1.IntercomId = -1
memory1.IntercomNumber =
memory1.DKtype = 21
memory1.PickupValue =

memory2.Line =0
memory2.type = N/A
memory2.Value = %BWEXTENSION-1%
memory2.KEY_MODE = Asterisk
memory2.HotNumber =
memory2.HotLineId = 1
memory2.Callpickup =
memory2.IntercomId = -1
memory2.IntercomNumber =
memory2.DKtype = 21
memory2.PickupValue =

[ cfg:/phone/config/Contacts/LDAP.cfg ]
LDAP.NameFilter =
LDAP.NumberFilter =
LDAP.host =
LDAP.port =
LDAP.base =
LDAP.user =
LDAP.pswd =
LDAP.MaxHits =
LDAP.NameAttr =
LDAP.NumbAttr =
LDAP.DisplayName =
LDAP.version = 3
LDAP.SearchDelay = 2000
LDAP.CallInLookup = 0
LDAP.LDAPSort = 0
LDAP.DialLookup = 0
```

Phone-Specific File: %BWMACADDRESS%.cfg

NOTE: This is an example file and should be used for reference only.

```
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account 1 SIP Settings                                                    # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ account ]
[ cfg:/phone/config/voip/sipAccount0.cfg,account=0;reboot=1 ]

account.Enable = %BWLINE-BINARY-1%
account.Label = %BWCLID-1%
account.DisplayName = %BWCLID-1%
account.UserName = %BWLINEPORT-1%
account.AuthName = %BWAUTHUSER-1%
account.password = %BWAUTHPASSWORD-1%
account.SIPServerHost = %BWHOST-1%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport =  %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-1%
account.dialoginfo_callpickup = 0
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
```

```
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-1%
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-1%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account0.DisplayName =
Account0.Server =
Account0.Port =
Account0.UserName =
Account0.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account2 Registration Settings                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/voip/sipAccount1.cfg,reboot=1 ]

account.Enable = %BWLINE-BINARY-2%
account.Label = %BWCLID-2%
account.DisplayName = %BWCLID-2%
account.UserName = %BWLINEPORT-2%
account.AuthName = %BWAUTHUSER-2%
account.password = %BWAUTHPASSWORD-2%
account.SIPServerHost = %BWHOST-2%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport =  %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-2%
account.dialoginfo_callpickup = 0
```



```
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-2%
account.SubscribeACDExpire= 3600
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-2%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account1.DisplayName =
Account1.Server =
Account1.Port =
Account1.UserName =
Account1.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account3 SIP Settings                                                 # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/voip/sipAccount2.cfg,reboot=1 ]

account.Enable = %BWLINE-BINARY-3%
account.Label = %BWCLID-3%
account.DisplayName = %BWCLID-3%
account.UserName = %BWLINEPORT-3%
account.AuthName = %BWAUTHUSER-3%
account.password = %BWAUTHPASSWORD-3%
account.SIPServerHost = %BWHOST-3%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
```



```
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport = %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-3%
account.dialoginfo_callpickup = 0
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-3%
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-3%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account2.DisplayName =
Account2.Server =
Account2.Port =
Account2.UserName =
Account2.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account4 SIP Settings                                              # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/voip/sipAccount3.cfg,reboot=1 ]

account.Enable = %BWLINE-BINARY-4%
account.Label = %BWCLID-4%
account.DisplayName = %BWCLID-4%
account.UserName = %BWLINEPORT-4%
account.AuthName = %BWAUTHUSER-4%
account.password = %BWAUTHPASSWORD-4%
account.SIPServerHost = %BWHOST-4%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
```



```
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport = %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-4%
account.dialoginfo_callpickup = 0
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-4%
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-4%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account3.DisplayName =
Account3.Server =
Account3.Port =
Account3.UserName =
Account3.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account5                                                             # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/voip/sipAccount4.cfg,reboot=1 ]
account.Enable = %BWLINE-BINARY-5%
account.Label = %BWCLID-5%
account.DisplayName = %BWCLID-5%
account.UserName = %BWLINEPORT-5%
account.AuthName = %BWAUTHUSER-5%
account.password = %BWAUTHPASSWORD-5%
account.SIPServerHost = %BWHOST-5%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
```



```
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport = %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-5%
account.dialoginfo_callpickup = 0
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-5%
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-5%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account4.DisplayName =
Account4.Server =
Account4.Port =
Account4.UserName =
Account4.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Account6 SIP Settings                                                  # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
[ cfg:/phone/config/voip/sipAccount5.cfg,reboot=1 ]
account.Enable = %BWLINE-BINARY-6%
account.Label = %BWCLID-6%
account.DisplayName = %BWCLID-6%
account.UserName = %BWLINEPORT-6%
account.AuthName = %BWAUTHUSER-6%
account.password = %BWAUTHPASSWORD-6%
account.SIPServerHost = %BWHOST-6%
account.SIPServerPort = 5060
account.SIPListenRandom = 0
account.SIPListenPort = 5062
account.Expire = 3600
account.UseOutboundProxy = %USE_SBC_BOOLEAN%
account.OutboundHost = %SBC_ADDRESS%
account.OutboundPort = %SBC_PORT%
account.EnableEncrypt = 0
account.EncryptKey = 29749
```



```
account.EncryptVersion = 1
account.BakOutboundHost =
account.BakOutboundPort = 5060
account.EnableSTUN = 0
account.proxy-require =
account.ptime = 20
account.srtp_encryption = 0
account.srtp_encryption_algorithm =0
account.BackupSIPServerHost =
account.BackupSIPServerPort =
account.Enable 100Rel = 0
account.precondition = 0
account.SubsribeRegister = 0
account.CIDSource = 1
account.EnableSessionTimer = 1
account.SessionExpires = 3600
account.SessionRefresher = 2
account.EnableUserEqualPhone = 0
account.BLFList_URI =
account.BlfListCode =
account.SubsribeMWI = 1
account.AnonymousCall = 0
account.RejectAnonymousCall = 0
account.Transport = %SIP_TRANSPORT%
account.ShareLine = %BWSHAREDLINE-6%
account.dialoginfo_callpickup = 0
account.AutoAnswer = 0
account.MissedCallLog = 1
account.AnonymousCall_OnCode =
account.AnonymousCall_OffCode =
account.AnonymousReject_OnCode =
account.AnonymousReject_OffCode =
account.BLANumber =
account.SubscribeMWIExpire = 3600
account.RegisterMAC = 0
account.RegisterLine = 0
account.conf-type = 2
account.conf-uri = %BWNETWORK-CONFERENCE-SIPURI-6%
blf.SubscribePeriod = 1800
blf.BLFList_URI = %BWBLF-USER-6%

[ cfg:/phone/config/Contacts/BroadSoft.cfg ]
Account5.DisplayName =
Account5.Server =
Account5.Port =
Account5.UserName =
Account5.PassWord =

# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #
# # Feature Settings                                                       # #
# # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # # #

[ cfg:/phone/config/user.ini,reboot=0 ]
AlwaysFWD.Enable = %BWCFA-BINARY-1%
AlwaysFWD.strTarget =
AlwaysFWD.On_Code = %BWFAC-CFA-ACTIVATE-1%
AlwaysFWD.Off_Code = %BWFAC-CFA-DEACTIVATE-1%

BusyFWD.Enable =
BusyFWD.strTarget =
BusyFWD.On_Code = %BWFAC-CFB-ACTIVATE-1%
BusyFWD.Off_Code = %BWFAC-CFB-DEACTIVATE-1%
```



```
TimeoutFWD.Enable =
TimeoutFWD.strTarget =
TimeoutFWD.Timeout = 50
TimeoutFWD.On_Code = %BWFAC-CFNA-ACTIVATE-1%
TimeoutFWD.Off_Code = %BWFAC-CFNA-DEACTIVATE-%
```

References

[1] Yealink, Inc. 2010. *Yealink TxP SIP Phone User Manual*, *Release 50.2*. Available from Yealink at http://www.yealink.com/index.php/Support/.

[2] BroadSoft, Inc. 2012. *BroadWorks Device Management Configuration Guide*, *Release 18.0*. Available from BroadSoft at xchange.broadsoft.com.

[3] BroadSoft, Inc. 2012. *BroadWorks Redundancy Guide, Release 18.0*. Available from BroadSoft at xchange.broadsoft.com.

[4] BroadSoft, Inc. 2012. *BroadWorks SIP Access Device Interoperability Test Plan, Release 18.0*. Available from BroadSoft at xchange.broadsoft.com.

[5] BroadSoft, Inc. 2012. *BroadWorks Device Management Interoperability Test Plan*, *Release 18.0*. Available from BroadSoft at xchange.broadsoft.com.

